Claims

1. An electroluminescent material comprising an oxide having a perovskite-type crystal structure represented by General Formula RMO_3, wherein R represents at least one rare-earth element, and M represents Al, Mn or Cr.

2. An electroluminescent material comprising an oxide having a perovskite-type crystal structure represented by General Formula R_2CuO_4, wherein R represents at least one rare-earth element.

3. An electroluminescent material comprising an oxide having a perovskite-type crystal structure represented by General Formula $RZ_2Cu_3O_6$, wherein R represents at least one rare-earth element, and Z represents at least one alkali-earth metal.

4. An electroluminescent material according to any one of Claims 1 to 3, wherein the oxide further comprises at least one dopant selected from the group consisting of alkali-earth metals, Mg, alkali metals, and transition metals.

5. An electroluminescent material according to any one of Claims 1 to 4, wherein the rare-earth element R is at least one member selected from the group consisting of Sc, Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, and Lu.

6. An electroluminescent material according to Claim 3 or 4, wherein the alkali-earth metal is at least one member selected from the group consisting of Ca, Sr, and Ba.

7. An electroluminescent material according to Claim 4, wherein the dopant is Mg.

8. An electroluminescent material according to Claim 4, wherein the alkali metal is at least one member selected from the

group consisting of Li, Na, K, Rb, and Cs.

9. An electroluminescent material according to Claim 4, wherein the transition metal is at least one member selected from the group consisting of Ti, V, Cr, Mn, Fe, Co, Ni, Cu, and Zn.

10. An electroluminescent material according to Claim 4, wherein the proportion of the alkali-earth metal dopant contained in the oxide is 0.001 to 10% when expressed as a mole % of the alkali-earth metal dopant relative to M or Cu.

11. An electroluminescent material according to Claim 4, wherein the proportion of the Mg dopant contained in the oxide is 0.001 to 10 % when expressed as a mole % of Mg dopant relative to M or Cu.

12. An electroluminescent material according to Claim 4, wherein the proportion of the alkali metal dopant contained in the oxide is 0.001 to 10 % when expressed as a mole % of alkali metal dopant relative to M or Cu.

13. An electroluminescent material according to Claim 4, wherein the proportion of the transition metal dopant contained in the oxide is 0.001 to 10 % when expressed as a mole % of transition metal dopant relative to M or Cu.

14. An electroluminescent element comprising an electroluminescent layer formed from an oxide electroluminescent material of any one of Claims 1 to 13.

15. An electroluminescent element according to Claim 14, wherein the electroluminescent layer is formed from a single-crystalline oxide thin film.

16. An electroluminescent element according to Claim

14, wherein the electroluminescent layer is formed from a polycrystalline oxide thin film.

17. An electroluminescent element according to Claim 14, wherein the electroluminescent layer is obtained by the compression molding of oxide fine particles, or by forming a paste comprising oxide fine particles into a layer and then drying.

18. An electroluminescent element according to Claim 14, wherein the electroluminescent layer is obtained by the compression molding of a mixture of oxide fine particles and a binder, or by forming a paste comprising a mixture of oxide fine particles and a binder into a layer and then drying.

19. An electroluminescent element according to Claim 14, wherein the electroluminescent layer is formed by sputtering.

20. An electroluminescent element according to Claim 14, wherein the electroluminescent layer is formed by laser ablation.

21. An electroluminescent element according to Claim 14, wherein the electroluminescent layer is formed by metal salt thermal decomposition.

22. An electroluminescent element according to Claim 14, wherein the electroluminescent layer is formed by metal complex thermal decomposition.

23. An electroluminescent element according to Claim 14, wherein the electroluminescent layer is formed by a sol-gel process using an alkoxide.

24. An electroluminescent element according to Claim

14, wherein the electroluminescent element further comprises a light reflection layer.